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CLINICS.

HOSPITAL NOTES AND GLEANINGS.

Conservative Surgery.—We have not unfrequently placed before our readers examples of diseased joints in which resection had been successfully performed—in cases, too, which many surgeons would not have hesitated to treat by amputation. Conservative surgery so far was of inestimable value in saving the limbs. Yet we must observe, that other means besides excision, will do good occasionally, and equally save limb and joint, which, perhaps, had already been condemned to amputation. In St. Bartholomew's Hospital there are several cases of diseased joint—the hip, the knee, and the elbow—which seem to be doing well under the treatment pursued. In those wherein contraction of the knee has ensued, straightening is being accomplished by the use of Ferguson's irons and boot, as employed in the Royal Orthopædic Hospital.

There is a little boy in Abernethy ward, ten years of age, who received a blow with a poker a year ago, upon his right knee, which penetrated the joint. This was followed by inflammation, destructive disease, and ulceration of the cartilage. All the symptoms of disorganization, suppuration, &c., were present, and the leg was condemned for amputation. It, however, was reserved as an illustration of true conservative surgery by Mr. Skey, who treated the boy, so that he recovered with a bent knee. He was lately under Mr. Coote's care, who has used the boot and irons in common use at the Orthopædic Hospital, with a cog-wheel, &c., and the leg is not only straight, but the boy can walk about the ward with the

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utmost facility, and, so far as we can judge, is quite cured.

There is another child, a little girl, eight years of age, in the hospital, in whom excision of the left knee joint was contemplated for extensive disease, the result of a fall ten months before, with the formation of an abscess in the calf six weeks ago, evidently in connection with the joint. She was admitted on the 28th of April, the joint had become contracted, and the abscess spoken of formed while in the hospital; and yet under careful treatment this child has got quite fat and hearty, with a good complexion, and the limb is becoming straight under gradual extension by the same means as in the previous case.

These cases, and many others, show what can be done to save both joints and limbs; it matters not what method is chosen, so that the desired end is attained.—*Lancet*, Sept. 11, 1858.

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Excision of the Hip-joint.—A few weeks ago we recorded three recent instances of excision of the hip joint, and we will now merely refer to a fourth. A little boy was admitted into King's College Hospital with extensive and old-standing disease of his left hip-joint, with the remains of numerous old sinuses and abscesses which had apparently healed, leaving several cicatrices which had become blended into one very large one. The disease had been existing between three and four years, and he was seen by Mr. Fergusson about ten months ago, at which time he recommended resection of the joint, but the parents would not consent. The child's health, however, got very bad, his joint was quite stiff, the knee drawn up, and his condition very precarious, and his parents therefore consented to the operation, which was performed under the influence of chloroform on the 14th inst., on the same occasion as the two knee joints already described. The parts around the joint were found to be very rigid; the head of the bone was in the natural position, but the greater part of it was absorbed, the remains resting upon the cotyloid cavity, which had become filled with new material, and had no evidence of disease affecting it. The lips of the wound, which consisted of a single longitudinal incision, were brought together with silver-wire sutures, and the leg and thigh placed in an interrupted splint. The little patient has been doing well since the operation, and will probably recover with a useful limb. It is possible, in such a case as this, that the patient might have completely recovered without resection, but it would have been with a permanently stiff joint, and after a long course of illness.

There is a little girl at present in the Royal Free Hospital, under Mr. Cooke's care, with disease of the left hip-joint and the formation of an abscess over it, which has not yet burst, which, if submitted to excision in time, promises to be a successful case.

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Ligature of Both Femoral Arteries Fifteen Years ago.—There is now a man in Guy's Hospital both of whose femoral arteries were tied about fifteen years ago. He is now aged about 45, and in good health, having been admitted (under Mr. Bryant's care) on account of a fractured metatarsal bone, and not for any constitutional disease. In 1841 Mr. Morgan tied his left femoral for the cure of an aneurism in the popliteal space, and in 1843 a similar operation was required for a like condition in the opposite limb. He recovered well from both operations, and returned to his work, which is that of a ship's porter. He is accustomed to carry heavy weights on his back, and to walk with them up steps, ladders, etc. He appears to have been of average steadiness as regards his habits, being used to a fair allowance of stimulants. The occurrence of symmetrical disease of the arterial system is usually a sign of very bad augury. Excepting at an enormous premium no Insurance Society would take the life of a man who had just been cured of a second popliteal aneurism, especially if it were known that he intended to go on with his previous occupation. In this instance, as the man is after so long an interval still in good health and without any indication of thoracic or other disease, we can only suppose that the degeneration of the arterial coats was not so general as might have been expected. In all probability the nature of his laborious occupation was very influential in causing the aneurisms to appear when and where they did.

We may note that on neither side can the tibial arteries anterior or posterior be found. There is no thickening or induration of parts in either popliteal space.—*Med. Times and Gaz.*, Sept. 18, 1858.

Injecting Perchloride of Iron in Varicose Veins.—At University College Hospital, the plan generally resorted to in the treatment of varicose veins is, the passage of pins beneath the vessels, and twisted threads over the pins, which effectually produces obliteration. We saw another method put into practice recently by Mr. Henry Thompson—that of injecting the perchloride of iron by means of a small syringe, and minute trocar and canula, into the veins themselves. This generally produces immediate coagulation of the blood, and such was the case in the present instance, the patient being a female about forty years of age. The perchloride was injected in four different places, and the coagulum was most distinctly felt beneath the skin. There was also one pin used, but as the varix was more generally diffused than usual, and therefore not so easy to treat by the pins, the injection was preferred. With the exception of severe pain being complained of in the groin of the affected leg, the left, some two or three days after the operation, she has gone on pretty well, and the veins are obliterated. This mode of operation has been resorted to once before in this hospital, on another patient, unsuccessfully. —*Lancet*, Oct. 2, 1858.

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Fatal Consequences following a Simple Fracture of the Forearm.—An illustration of the severity of the consequences which occasionally result from an apparently slight injury occurred the other day in a case under Mr. Bryant's care in Guy's Hospital. On Thursday week an Irish lad, aged 17, of pale and flabby appearance, but not otherwise unhealthy, was admitted with a simple fracture of the left forearm. It was at first intended to have put it up and let him return home, as there did not seem to be any cause for especial anxiety; but there chancing to be several beds at liberty, it was ultimately determined to take him in. There was considerable œdema, but no ecchymosis. The accident had been caused by a blow from the rapidly revolving "jigger" of a crane. According to custom in such cases, the limb was laid on sand-bags, and cold lotions applied, *no splints being used*. Nothing unusual occurred during the first few days. On Monday morning, however, it was observed that the œdema, which had hitherto slowly advanced, had enormously increased during the night, and had extended from the upper arm to the side. He had also been very restless. On Monday he was much worse, the whole arm being tense, brawny and cold. On Tuesday gangrene of the whole extremity was just on the point of commencing, but its progress was arrested by the death of the lad, which took place before noon. The whole duration of the serious symptoms had been but forty-eight hours. Unfortunately, no autopsy could be obtained, and the cause of this so rapid mischief, therefore, remains a mystery. There had been no signs of any internal lesion, nor had any rigors occurred to indicate the existence of phlebitis. On the morning of his death, whilst quite rational, the lad had stated that on waking in the night he had found his opposite arm also quite numb, and on trial it proved to be quite destitute of sensation.

Had such a case as this happened to a country surgeon in private practice, and had splints been employed, it is not at all improbable that very disagreeable accusations might have been made as to the cause of its untoward result.—*Med. Times and Gaz.*, Sept. 18, 1858.

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Fracture of the Base of the Skull by Contrecoup in a Child.—A child, aged 8½ years, was admitted into St. Bartholomew's Hospital on July 3d, under the care of Mr. Stanley, in a state of insensibility. It appears that he had been riding on the back of another child, who was only twelve years old, and fell on to the pavement striking his left temple. On admission, bloody serum was observed to be oozing out of his right ear. The pupils were contracted and did not act; the pulse was small, 120; the skin and respiration normal. There was ecchymosis over the left temple; no injury to the skull could be felt. The boy remained in a state of insensibility for an hour, when he gradually recovered, and next day seemed quite well. He spoke with his brother for some time quite rationally. He was ordered milk diet, but no medicine was necessary. On the following day, however, July 5th, at one P. M., he was seized with convulsions, and became speedily insensible. The pupils were dilated; the pulse 130, small and frequent; the features and tongue were drawn to the left side. He was ordered three grains of calomel every three hours; four leeches were applied to the temples,

and a blister to the back of the neck, and this was dressed with strong mercurial ointment. He sank rapidly, however, and died on July 6th.

On *post-mortem* examination, extensive inflammation of the membranes of the brain was found, and pus had been formed at the base. The convolutions of the brain were flattened from distension of the ventricles. A fracture was seen extending through the petrous portion of the right temporal bone, and cutting across the meatus auditorius internus, and the membrana tympani was ruptured. A bruise was found on the left temple, on the opposite point of the skull to the fracture.—*British Med. Journ.*, Sept. 4, 1858.

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Instance of True Ventral Hernia from Injury.—A man, aged 50, is at present under Mr. Bryant's care in Guy's Hospital, on account of a large hernial protrusion from direct rupture of the abdominal muscles. The injury was caused by a fall from a mast-head, the belly being struck in the fall upon a pump-handle. The man was admitted almost immediately afterwards, and on the right side midway between the iliac crest and the median line was found a tumour evidently consisting of extruded bowel, about the size of a large adult fist. It could not be reduced by any pressure which it was deemed warrantable to make; and as there were no symptoms of strangulation it was deemed best to wait. During the next day or two he had hiccough, but beyond this there was nothing to excite uneasiness. Ice was applied to the tumour, and opium administered by the mouth. He has now been nearly a fortnight in the hospital, and is quite free from symptoms. The tumour may be diminished by pressure, but refills as soon as the hand is removed. It is not intended to attempt anything further for its radical cure, as the aperture is evidently very large. A protecting cupped truss will probably be contrived for the man before he is discharged.

Herniæ of the kind exemplified in the above case are exceedingly rare. We never recollect to have seen an exact parallel to it. Three or four somewhat similar will be found recorded in our reports during the last few years in which ventral hernia had followed abscesses, stabs, etc., but none in which it was from direct muscular laceration.—*Med. Times and Gaz.*, Sept. 18, 1858.

Two Vesico-Vaginal Fistulæ in the same Patient—Operation—Cure.—We may fairly write of Vesico-vaginal Fistula, that it is no longer one of the surgeon's opprobria. By the use of metallic sutures and Dr. Bozeman's shield it would appear that we may henceforward consider apertures in the vaginal parietes as easily remediable as are cases of hare-lip or of club-foot. Notwithstanding an immense amount of labour and ingenious skill which had been devoted to their cure in former years by many English surgeons, yet the success obtained had been very small prior to the introduction of the two improvements above mentioned by our American brethren. Cures were very exceptional, failures and disappointment the rule. The condition to be treated was happily too rare in this country to give a large share of experience to any individual surgeon. To its great comparative frequency amongst the negro women of the United States, must no doubt be attributed in some measure the triumph which our Transatlantic confrères have gained. We say this without in the least desiring to detract from the credit which all will acknowledge to be their due. We have recorded in these reports during the past few years several instances of success by the older methods. In one, about a year ago, Mr. Luke succeeded in procuring perfect union by use of the common silk suture only, and in a second, shortly afterwards, Mr. Paget, by employing the silver wires (but not the shield) obtained a like happy result. Dr. Beck had two successful cases at the Samaritan Hospital, and some other cases occurred in private practice. Successful cases are, however, rare and exceptional. In the future, we confidently trust that we shall have to record numerous cases of cure, or even that they come to be considered not of more interest than so many hare-lip operations would be. At present, however, we are in a transition stage, and we have to put on record this week a remarkable example of success obtained by simple suture.

Mahala P., aged 26, was admitted into Guy's Hospital under Dr. Oldham's care, on June 9, 1858. She was a married woman and the mother of four children at three confinements, her first having been twins. She had enjoyed good health until subsequent to her last lying-in, which took place in the preceding March. Her previous

labours had been good, but her account of the last was as follows: On March 15, when about her full time, the waters suddenly broke without any preceding labour pain. This was on a Monday. No expulsion pain followed until Friday. On Saturday evening the surgeon in attendance told her that the labour was delayed from the loaded state of the bowels, and advised the administration of an enema, which latter acted freely. The pains continued incessant until the following Monday, when as there appeared little chance of the child being born, craniotomy was resorted to. The child had been dead some time. All went on afterwards pretty well up to the eighth day, when she left her bed for a short time. During the night of the tenth day, the bladder gave way, and in the morning she found herself drenched in urine. For some days before this she had noticed the escape of "yellow matter," with burning sensations in the vagina. For the ten weeks next following, she could not retain her urine in the least, and it flowed away constantly. In June, as we have seen, she obtained admission into Guy's,

It was found on examination that there existed two distinct fistulæ communicating with the bladder. Both were a little beyond the last part of the urethra, and entered the floor of the viscus. The larger was of sufficient size to admit the tip of the little finger, the other would not do more than receive a small quill.

On June 18 the operation was performed on the larger one. Its edges having been freely denuded without removing any of the vesical mucous membrane, a single silk suture, introduced by means of a large curved needle, was made to close the wound. The only point in passing the suture worth especial notice was that Mr. Forster was careful to give it a deep hold. The patient was under the full influence of chloroform during the operation. A catheter was subsequently retained in the bladder, and she was made to lie on her face. On the ninth day the suture was cut, and union was found to be perfect. But little incontinence now remained, as the other fistula was of small size. As the bladder filled, however, the dribbling away always commenced, and a month after the first operation nitric acid was applied to the edges of the second opening in the hope of procuring its closure. No good effect was, however, produced, and it was determined to employ the suture.

The second operation was done on August 9. It resembled the former one in every respect, excepting that a silver wire suture was used instead of silk. A single suture alone was necessary. Some difficulty was encountered in attempting to withdraw it on the ninth day, and it was accordingly left in until the eleventh. The union was perfect.

The woman left the hospital on August 27 in every respect quite well.

It should be remarked that in this case the catheter was retained in the bladder, and the prone posture observed on each occasion during the whole interval between the operation and the removal of the suture. To this precaution the successful result was no doubt in a considerable measure attributable.—*Med. Times and Gaz.*, Sept. 18, 1858.

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Anæsthesia from Galvanism.—During the last week Mr. Marshall, of University College Hospital, following out the principles now so widely discussed of tooth extraction under the influence of electricity, has made some interesting observations with the view of testing the powers of the electric current to modify the sensibility of parts operated on *by the knife*. The operations, nine in number, performed under its influence, include the incising of abscesses and carbuncles, the removal of necrosed bone, and also of a fatty tumour of considerable size. The general effect has been to modify the pain of ordinary incisions, rendering the suffering less acute. In one case this effect was very striking. On some occasions, however, the pain was aggravated, apparently owing to the strength of the current employed. Perfect insensibility was never produced, and the results claim notice as those of early trials only. Mr. Marshall's first operation was performed on the 9th inst. The coil apparatus was used, one pole being connected with the knife employed, and the other placed either on the patient's neck or in his hand—the current being, of course, intermitting. Mr. Marshall has promised to furnish us with a more detailed account of these cases.—*Med. Times and Gaz.*, Sept. 18, 1858.

MEMOIR.

Report on Anæsthesia. By R. M. GLOVER, M. D., F. R. S. Ed., &c.

No. I.—Divisions of the Report.—1st. History of anæsthesia up to the time when the occasional danger of anæsthetic agents became established.—Re-discovery of anæsthesia in modern times.—Nitrous oxide, ether.—Fatal case of etherization.—Attempts to find a substitute.—Professor Simpson and chloroform.—Dr. Glover's experiments on chloroform.—History of chloroform.—Physiological properties first accurately stated by Dr. Glover.—Chloric ether—Anæsthetic effects on animals first demonstrated by Flourens.—Dr. Simpson's application of it in practice.

RECENT fatal cases having again called public attention and that of the profession to the danger attending the use of chloroform, and the eccentric character, if I may use such a phrase, of the fatal result,[1] I have thought right to use the occasion to review some facts, not generally known, connected with the early history of chloroform, which throw some light upon the action of the substance, before stating my views of its *modus operandi*, and what appears to me the best mode of preventing its occasionally calamitous effects.

I intend to divide this report into three parts. In the first I shall trace the history of anæsthesia up to the time of the first fatal cases, when the profession was in possession of facts which could leave no doubt that the new class of anæsthetic agents was capable of relieving pain in surgical operations, in midwifery, and so forth, but that their use in certain cases was attended with great risk. In the second part I shall enumerate and briefly analyze all the fatal cases from those early ones described in the first part up to the present time, with the view of arriving, if possible, at the cause or causes of death; and in the third part I shall give what I consider the real *modus operandi* of the agents, and my views concerning the best means of averting danger, and the remedial measures to be employed where death is threatened.

1. The history of almost all inventions displays a somewhat similar character. There is nothing new under the sun. Anæsthesia was not unknown to the ancients. Pliny and Dioscorides distinctly state that the root of the mandrake has the power of throwing patients into such a deep sleep as to render them insensible to the pain of surgical operations. Towards the close of the seventeenth century a secret agent was employed to render a king of Poland insensible during the removal of a portion of his foot. But the practice of anæsthesia had completely passed away. The first person to propose its renewal in our time was Sir Humphry Davy. He says, in his remarks on nitrous oxide: "As nitrous oxide, in its extensive operation, appears capable of destroying physical pain, it may probably be used with advantage in surgical operations in which no great effusion of blood takes place." And it was with nitrous oxide that, in 1844, Mr. Wells, of Connecticut, first succeeded in removing teeth without pain, and suggested the use of this gas in surgical operations.[2] What is important is this: during the reign of ether there were a few cases where ether was supposed not to be disconnected with the cause of death. There was also the case of Mrs. Parkinson, who died at Grantham on the 9th of March, 1847, two days after the removal of a tumour, while she was in a state of partial anæsthesia; and although the *post-mortem* appearances were anything but decided, the jury returned a verdict of "died from the effects of ether." The only case, however, in which ether seems to have produced death with the rapidity in which the same result has unfortunately so often attended the use of chloroform, is one which occurred at Auxerre, in France, in August, 1847. A man, aged fifty-five, operated on for cancer, was rendered quite insensible by ether, when suddenly, just as the operation had commenced, the face turned violet and then livid; the pulse became low, and then ceased to beat; and he was found to be quite dead in ten minutes from the commencement of the inhalation. The *post-mortem* appearances were chiefly congestion of the posterior portions of the lungs, with frothy mucus in the air-tubes, which were stained of a dark colour, and darkness and fluidity of the blood. These appearances closely resemble, as will be seen, what has been often found in chloroform poisoning.

[1] The *Morning Advertiser* lately, in a leading article, called for a medical commission to inquire into the action of chloroform. What shows the extraordinary notions entertained upon the subject, the writer speaks as if the public heard for the first time of the danger of chloroform. So far is this from being the case, that it will be found that both myself and Mr. T. Wakley, from the results of our experiments, before a single fatal case had occurred, warned the profession and the public.

[2] The history of the introduction of ether, and the rival claims of Messrs. Morton and Jackson, of Boston, will be found in the *British and Foreign Medico-Chirurgical Review* for January, 1852.

While considerable discussion was being carried on concerning the merits of etherization, and especially its application to midwifery, all at once an immense sensation was excited by the announcement that a new remedy of superior power had been discovered by Professor Simpson. Many other ethers had been experimented on before this, besides sulphuric ether—as muriatic, nitric, acetic, and formic ethers. There can be no doubt that a substance of no very certain composition, but containing chloroform, had been used on the recommendation of Mr. Jacob Bell, in the spring of 1847, and that Flourens had used the vapour of chloroform on animals about the same time, as we shall immediately see. Dr. Simpson's first publication was dated November 15, 1847. Long previously, I had published an elaborate series of experiments on animals with chloroform and its allied bodies, at a time when their very names were almost unknown, and stated their physiological properties with great accuracy; and this leads me to speak of chloroform and its previous history before Dr. Simpson's application of it to practice.

According to some historical references given by the late Dr. Pereira, in the *Pharmaceutical Journal*, chloroform was first obtained by Mr. Samuel Guthrie, of Sackett's Harbour, New York, by distilling a mixture of chloride of lime and alcohol. He supposed, however, that he had only obtained chloride of olefiant gas (the Dutch liquid), or muriatic ether, by a new process. He communicated his observations to *Silliman's Journal* for January, 1832, under the title of "A New Mode of Preparing a Spirituous Solution of Chloric Ether." He said that he had used the product for six months, occasionally up to the point of intoxication; had found it very grateful, producing a flow of spirits and inclination to loquacity, without leaving behind it the depression consequent upon the use of ardent spirits; and he recommended it, mixed with an equal quantity of water, as a safe, quick, energetic, and palatable stimulus. Mr. G. Black, of Bolton, in the *Medical Gazette* of September, 1833, published an article on the same substance, headed "Chloric Ether: New Remedy in Spasmodic Asthma." He calls the ether a solution of chloride of carbon in alcohol, "brought into use by our American brethren," and considers it a light and diffusive cordial likely to be of use in spasmodic and adynamic states, and recommends it in doses of half a drachm. About the same time as Mr. Guthrie, M. Soubeiran distilled a mixture of alcohol and chloride of lime, and termed the product bichloric ether. Next Liebig examined it, and, by some oversight, not finding any hydrogen, termed it chloride of carbon. Dumas, in 1834, first discovered its true chemical nature, and called it chloroform; while Liebig termed it perchloride of formyle.[1]

I was the first to describe correctly the physiological properties of chloroform and its analogous bodies, and to assign them their true place; and my experiments have a direct bearing upon the question as to the mode in which chloroform acts. These experiments were first published in the *Edinburgh Medical and Surgical Journal* for October, 1842, and were reprinted in the *Lancet* for February, 26, 1848; also in the *Medical Gazette*. They are to be found as part of a work on the physiological and medicinal properties of the whole group of chlorine, bromine, and iodine, and their compounds, and the relations which these bear to the chemical properties of the same. My great object was to test the truth of the great law, viz., that the chemical and physiological properties of bodies are closely related; and, taking up for experiment the least known of the remarkable group which formed the subject of my paper, I was particularly led to test the properties of chloroform and its analogous bodies, then almost unknown. The chapter is headed "Physiological Properties of Chloride and Bromide of Olefiant Gas, of Chloroform, Bromoform, and Iodoform."[2]

The following are the general conclusions arrived at:—

"*Remarks.*—Great resemblance exists amongst the properties of this class of bodies, which appear to form a new order of poisonous substances, uniting in themselves physiological properties which are not found united in any other class of poisons. The distinguishing characteristics are—first, the remarkable power which they possess of obstructing the pulmonic circulation, whe-

[1] Chloroform, bromoform, and iodoform are analogous to formic acid, each of these having three equivalents of chlorine, bromine, iodine, or oxygen, added to the radical formyle, which is C_2H. Thus we have respectively C_2HCl_3, C_2HBr_3, C_2HI_3, and C_2HO_3.

[2] The general resemblance of the group is first pointed out; all may be used as anæsthetic agents except iodoform, on account of its solidity. Chloroform is then selected, as the most remarkable, as a specimen of the rest.

ther they are injected into the veins or introduced into the stomach; then the action on the spinal cord, and afterwards on the brain; and, lastly, the corrosive and irritant action exercised on the stomach. In the case where chloroform was injected into the carotid, death appears to have been produced by the loss of nervous power from the direct action of the poison on the brain. This effect might be accounted for by the obstruction thus induced to the flow of blood through the capillaries of the organ. The mechanical properties of this class of bodies may particularly fit them for obstructing the circulation through the lungs. It was shown, for instance, that when injected into the jugular, their smell is almost immediately perceptible in the expired air; so that the vapour getting into the air-cells may place the blood much in contact with the substance. The action on the spinal cord is very different from that of strychnia, to which my friend Dr. Cogswell compared it in the case of iodoform. Strychnia destroys the influence of the will over the muscles, but appears to excite the spinal cord, which loses its sensibility under the action of this class of poisons. The blackening of the mucous membrane of the stomach, which these substances produce, is another curious property. This effect appears to be compounded of the corrosive and irritant action of the poison, its effects on the colouring matter of the blood, and that congestion of dark blood found in the stomach in certain cases of coma. Where the poison was introduced directly into the circulation, we had the heart's action put a stop to, and its irritability destroyed when the dose was large. In other cases a smaller dose caused obstruction to the flow of blood through the lungs, while the heart's action continued; and in one case this obstruction was shown by the hæmadynamometer. In that case the pressure in the arterial system was diminished, but the heart's action continued."

I then remark on the great power possessed by the whole class of permeating the tissues.

It must be remembered that my experiments were performed at a time when nothing was known of the physiological properties of this class of bodies, except the trifling facts previously referred to; and even now the general correctness of my conclusions must be granted. I pointed out the fact of the insensibility of the animals when pricked and pinched, but I never thought of applying the facts I had observed to the prevention of pain in surgical operations; indeed, no one thought of anæsthesia at the time.

The next great fact in the history of chloroform is, substantially, the first application of its vapour as an anæsthetic agent; for the chloric ether of Mr. Bell was at most only a mixture containing chloroform, and was not administered on acconnt of the chloroform. On the 8:h of March, 1847, M. Flourens, in a communication to the French Academy of Sciences, related some experiments made by him on animals with the vapour of chloroform. "It was especially by the effects of muriatic ether that he was led to try the new body known by the name of chloroform. At the end of some minutes—of six in a first experiment, and of four in two others—the animals submitted to the operation were distinctly *etherized*. The spinal cord was then exposed. The posterior roots of the spinal nerves were found to be insensible; of five anterior roots, only two preserved their motive power, the three others had lost it. Thus it is incontestable that the discovery of the anæsthetic properties of chloroform is due to a French philosopher. . . . . Unfortunately, he confined his operations to animals."[1]

Nothing more of a public character took place with regard to chloroform till, on the 10th of November, 1847, Dr. Simpson presented his first results at a meeting of the Medico-Chirurgical Society of Edinburgh. What these were, it is not necessary to repeat here. Suffice it to state, that to Dr. Simpson belongs the *sole* and *entire* merit of first applying the vapour of *pure* chloroform as an anæsthetic agent in the *human subject*.[2]—*Lancet*, Oct. 9, 1858.

[1] Bouisson: *Traité de la Méthode Anæsthétique appliquée à la Chirurgie et aux différentes branches de l'Art de Guérir*, p. 77.

[2] The following, from a pamphlet by Mr. Waldie, of Liverpool (1847), is interesting: "To the best of my knowledge, from the result of many inquiries, it seems to have been introduced into this country, as a medicinal agent, first in Liverpool, where, indeed, in the form of a spirituous solution, it has been more known than in any other part of the country, and from which, I believe, the knowledge of its therapeutic properties extended. About the year 1838 or 1839 a prescription was brought to Apothecaries' Hall, Conduit Street, one ingredient of which was chloric ether. No substance being known there of that name, having the properties of that with which the mixture had been previously prepared, Dr. Brett, then the Company's chemist, in investigating the subject, found in the *United States Dispensatory* the

SANITARY SCIENCE.

Superior Salubrity of England.—The Registrar-General, in his last report on births, deaths, and marriages, says, that it is now well established by extensive observation, that England is the healthiest country in Europe. France stands next to England in salubrity. In the continental cities the annual rate of mortality is seldom less than 30 in 1000; and frequently as high as 40. In London the rate of mortality is only 25 in 1000. Statistical records prove that "the climate of England is eminently salubrious;" and it has not yet been shown that the climate of any part of the Continent is more salubrious than this island—crowned with hills of moderate elevation, sloping towards the east and the south; bathed by the showers of the Atlantic; drained naturally by rivers running short courses to the sea, cultivated more extensively than other lands, and producing those unequalled breeds of sheep, cattle, and horses, which flourish only in healthy places. The healthiest parts of England are not yet places of general resort, but the annual mortality in the various districts comprising watering places seldom exceeds 21 in a 1000 of the population, and is probably lower in these regions of the districts to which visitors resort. The lowest morality at the English watering-places, as they are rather vaguely designated, occurs at Eastbourne—only 15 in 1000; Worthing, the Isle of Wight, Mutford (including Lowestoft), Barnstaple (Ilfracombe inclusive), and Anglesey, 17 in 1000; Hastings, Upton-on-Severn (including Malvern), and Aberystwith, 18 in 1000; the Isle of Thanet, Newton Abbot (including the east and south-east of Devon), 19 in 1000. After these the rates of mortality rise gradually to 23 and 24, which numbers represent the somewhat less salubrious districts of Yarmouth and Bath. Clifton also stands as high as 23, but a part of Bristol is included. Tunbridge Wells stands at 20, Dover at 21, Cheltenham at 20, Warwick (Leamington) at 20, Derbyshire (Buxton, Matlock, etc.) at 20, Scarborough at 21, Harrogate at 20, Whitby at 21, Kendal at 20, and Bangor at 21. "It should always be borne in mind," says the Registrar, "in selecting places of resort, that through the peculiar nature of zymotic diseases, places usually healthy are periodically visited by epidemics, which can only be avoided by consulting recent returns, or by actual inquiries on the spot. The cleansing and sewerage of all watering-places require improvement, as their arrangements were made when sanitary science was at a low ebb."—*Med. Times and Gas.*, Oct. 9, 1858.

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Peculiar Effects of the Fumes of Phosphorus.—It has been ascertained by M. Moignot, an ecclesiastic well known in the scientific world, that the women employed in the manufacture of lucifer matches are very liable to miscarry; and so fully aware have the workwomen become of this peculiarity of phosphorus, that advantage has been taken of it to procure abortion. Nor is this all, for the same observer has ascertained that the emanations of phosphorus are excitants of the sexual organs in men. It has been noticed that this effect has been produced after the individuals have been exposed to the fumes for a certain time. It is incumbent upon medical men to investigate the matter, so that reliable data may be obtained.—*Lancet*, Oct. 16, 1858.

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Statistics of the Prevalence of Rickets at Dresden.—Dr. KUTTNER states, that rickets is extremely common in that city. Out of 9000 patients admitted into the Children's Hospital for the last twenty years, 1654 were rickety or had been so, the latter presenting unmistakable traces of the disease. Thus it would appear that the proportion of rickety children was 20 per cent.; and by leaving out from the total number of 9000 such children who were less than one year old, and could not as yet be affected with any symptoms of rickets, the proportion rises to 25 per cent. Dr. Küttner thinks that the cause of this state of things is the wretched condition of the labouring classes of Dresden,

formula of its preparation, and prepared some." Mr. Waldie states that the properties of the substance pleased some of the medical men, but the preparation was found of variable strength. He separated the chloroform, and dissolved it in a uniform quantity of pure spirit. He goes on to say that the vapour of this so-called chloric ether was used for anæsthetic purposes, "either in February or March last" (Mr. Bell). Then, "when in Scotland, in October last, Dr. Simpson introduced the subject to me, inquiring if I knew of anything likely to answer. Chloric ether was mentioned during the conversation, and, being well acquainted with its composition, and with the volatility, agreeable flavour, and medicinal properties of chloroform, I advised him to try it;" which accordingly Professor Simpson did.

(*To be continued.*)

as that city is not worse off, in a hygienic point of view, than other capitals. It is rather remarkable that out of these 1654 rickety children, 198 belonged to journeymen shoemakers, and 162 to journeymen tailors, being 25 per cent. of the whole number. Twins and children prematurely born were rather numerous. As to age, it was found that the largest number were from two to three years old. The influence of the mother's milk does not seem to have been well marked; for 387 had not had the breast, or had been suckled but a very short time; 360 were nursed for the ordinary period; and 455 for a longer time than usual. As vaccination had been accused of inducing rickets and scrofula, it will be interesting to notice that, out of 1258 rickety children, 759 had not been vaccinated; 491 had undergone the operation, and 35 had had the small-pox. The winter months were noticed to bring the largest number of rickety children into hospital. Dr. Küttner finally considers that rickets may be owing to the early use, with children, of much bread and potatoes.—*Lancet*, Aug. 21, 1858, from *Journal für Kinderkrankheiten*, Nos. 7 and 8, 1858.

MEDICAL NEWS.

DOMESTIC INTELLIGENCE.

Lallemand's Porte-Caustic broken in the Urethra.—Dr. A. H. Buchanan related to the Nashville Medical Society (September 1, 1858) the case of a young man who was in the habit of introducing Lallemand's instrument for the purpose of cauterizing the urethra, and had the mishap to break off that portion of the instrument which holds the caustic, into the bladder. At the time the caustic-holder was pretty well filled with nitrate of silver. He, soon after the accident, was seen by Dr. B., who made some efforts with instruments to extract the foreign body, but without success. He then advised the young man to return home, and, after some little time, to retain his urine until his bladder was uncomfortably full, and then get into a bath of warm water, on his hands and knees, and with considerable effort evacuate the bladder. The patient, feeling some anxiety about the matter, set about carrying out the orders immediately on his arrival at home, and, to his great relief of mind, succeeded in voiding the caustic-holder. Dr. B. stated that he had suffered no material inconvenience from the presence of the caustic in the bladder, which may have been as much as twenty grains.—*Nashville Monthly Record*, Oct., 1858.

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Yellow Fever in our Southern Cities.—We are gratified in being able to announce that this fatal pestilence is abating its ravages.

New Orleans.—In this city the mortality from yellow fever is steadily diminishing, as will be perceived from the following table, continued from our previous No., p. 159:—

DEATHS FROM YELLOW FEVER.

15th week, ending October	3,	. .	380
16th " "	10,	. .	390
17th " "	17,	. .	310
18th " "	24,	. .	265

Charleston.—The number of deaths in this city, from yellow fever, was—

For the week ending October	3,	. .	64
" " "	10,	. .	45
" " "	17,	. .	40
" " "	24,	. .	22
" " "	31,	. .	24

The number of deaths from the pestilence, from August 1 to October 9, was 573.

Mobile.—The *Mobile Advertiser*, of the 12th October, represents the mortality from the pestilence as being larger than during any preceding week. The total number of deaths up to that time, from the epidemic, amounted to 931.

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Army and Navy Medical Appointments.—Out of 27 candidates for appointment as assistant surgeons in the army, examined by the Board which met at Richmond, Va., last spring, only two were selected for that station.

Of 27 candidates for appointment as assistant surgeons in the navy, examined by the Board which met in Philadelphia last spring, seven only were recommended for appointment.

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Expulsion of Dr. Henry M. Hooke, of Lowell, from the Massachusetts Medical Society.—Dr. Henry M. Hooke, of Lowell, has been expelled from the Massachusetts Medical Society on the following charges preferred against him by the Middlesex North District Medical Society:—

1. For infraction of the 10th by-law of the Massachusetts Medical Society, in

offering to the public, while exercising the duties of a physician, medicines the composition of which he keeps a secret, thereby offering to cure disease by such secret medicines: in establishing, or causing to be established, for his benefit, and supporting a certain nostrum and drug shop, on Merrimack Street, in Lowell, kept by a Mrs. Clayes or Mrs. Lane, at which shop only, his prescriptions can be made up, the said prescriptions being written purposely so as to be unintelligible to all other apothecaries: in publishing his card in, and writing medical articles as advertisements, for a notoriously vile and quackish paper, called *The Medical Expositor*, the editor and proprietor of which is, and has been for years, as is well known, an irregular practitioner, who has recently been convicted by a jury for libel against a worthy citizen of this place, and paid the penalty therefor, by three months' imprisonment in the House of Correction, at Cambridge.

2. For conduct unbecoming and unworthy an honorable physician and member of this Society, in rudely and peremptorily refusing to pay his arrearages and annual assessments due to the Society, when called for: in manifesting hostility to the Society and its interests, by speaking of it in terms of disparagement and contempt: in frequent violations of the recognized code of Medical Ethics, in visiting, advising and prescribing for patients, while under the charge of other physicians, without the consent or knowledge of said physicians: in false and dishonorable conduct in consultations, by which he has impaired or destroyed the confidence of the patient and friends, in the consulting or attending physician, with whom he had met; and in other irregular and disreputable acts, equally adverse to the welfare of the public and to the interests and dignity of the profession.

The Board of trial, regularly appointed by the President of the Massachusetts Medical Society, met at Lowell, on the 15th inst., and duly considered the above mentioned charges, preferred against Dr. Henry M. Hooke, by the Middlesex North District Medical Society, whereupon it was voted, that the charges preferred against Dr. Henry M. Hooke, of Lowell, by that Society, have been substantiated, and the said Henry M. Hooke be, and hereby is, expelled from the Massachusetts Medical Society.

Medical College of Virginia.—Dr. Jas. B. McCaw, the able editor of the *Virginia Medical Journal*, has been elected Professor of Chemistry in this School, in place of Dr. Martin P. Scott, who resigned.

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The Medical and Surgical Reporter.—The journal from a monthly has become a weekly journal, and a large part of each No. will be devoted to reports of *Lectures* by distinguished Physicians and Surgeons; to Clinical Reports from Hospitals, &c., in this and other cities; and to *Reports of Medical Societies*. There is an ample field for a weekly journal in this city, and if the editors succeed in carrying out their plan, success can scarcely fail to reward their efforts. The editors are S. W. Butler, M. D., and W. B. Atkinson, M. D.

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Medical Journal of North Carolina.—This is the title of a new journal published under the auspices of the State Medical Society, and edited by Dr. Edward Warren. The first No. appeared in August last, but has not yet reached us.

FOREIGN INTELLIGENCE.

Deaths from Chloroform.—We have to notice this month no less than *four deaths* resulting from the inhalation of chloroform.

Case I.—Daniel Pheby, aged 8 years, was brought to the Ophthalmic Hospital, Moorfields, for the purpose of undergoing the operations for double internal strabismus. On October 1, chloroform was administered to him on a piece of lint; during the inhalation he struggled somewhat and cried out, but not in a greater degree than is usual with children. When the inhalation had lasted for about three or four minutes, the operation was commenced on the right eye, but, it being found that he flinched, a fresh dose of chloroform was poured upon the lint, and the latter was reapplied. Immediately after this the boy's face was noticed to become deadly pale, and his pulse had ceased; the administrator, in order to reapply the chloroform, had removed his finger from the temporal artery, and no one's finger was on the radial artery precisely at the moment of the occurrence of the pallor, but immediately before the reapplication of chloroform the pulse was

beating regularly, and at about eighty per minute. The tongue was directly drawn forward with forceps, and the boy was turned at once on his abdomen, with the view of adopting Marshall Hall's method of artificial respiration; this position, however, appearing inconvenient, he was without loss of time turned on his back, and artificial respiration was kept up for more than three-quarters of an hour by the old method, viz., by pressure of the hands on the thorax and abdomen. This answered well as far as the emptying and filling of the lungs were concerned, but neither cardiac sounds nor pulse could be detected. During the first twenty minutes of the treatment the boy gasped several times. Ammonia was freely applied to the nostrils, and cold effusion was used at first.

The autopsy was performed at twenty-four hours after death. The boy appeared well nourished, but some of the glands of the neck were enlarged, and the teeth generally were in a decayed condition.

Cranium.—The membranes were congested; the brain was large, and its substance did not separate from the pia-mater so readily as it should have done. The sinuses of the dura-mater were filled with fluid blood.

Thorax.—The lungs were intensely congested. The trachea contained a considerable quantity of viscid mucus, and its membrane was somewhat congested. The right ventricle of the heart was collapsed and empty (this may perhaps be accounted for by the fact that the cranium was the cavity first examined, and was allowed to hang over the end of the table, thus permitting the blood, which was wholly fluid, to drain away from the cut sinuses of the dura-mater).

The other portions of the heart were in a normal state.

Abdomen.—The liver and kidneys were intensely congested; the other viscera in a normal condition.

From inquiries made it seems probable that the boy suffered from meningitis in infancy; with this exception he had enjoyed good health. The quantity of chloroform used was about ʒiss, and this was divided into three doses.

The death would appear to have resulted from a sudden paralysis of the heart.—*Med. Times and Gaz.*, Oct. 9, 1858.

Case II.—A fine young woman, having obtained the consent of a medical practitioner for her having chloroform administered during the extraction of a tooth, went to Mr. Geo. Keeling, a druggist and dentist (at Epsom), who forthwith administered chloroform, or rather allowed his patient to assist herself to the vapour by means of a napkin. She became suddenly insensible, the tooth was extracted, and the patient sunk back dead.—*Lancet*, Sept. 18, 1858.

Case III.—Another death from chloroform has taken place. It occurred in the private practice of Mr. Lawrence, of St. Bartholomew's Hospital. The patient was a lady of middle age, and a remarkably healthy woman. The chloroform was administered on a handkerchief.—*Lancet*, Oct. 16, 1858.

Case IV.—We have already briefly alluded (p. 159) to the case of a boy (Wm. Rush), aged 11, who died from the inhalation of chloroform, and we can now give some of the particulars. It appeared from the evidence, at the inquest, that the deceased had received an injury of the foot some weeks previously, which had resulted in a considerable shortening of the great toe, and enlargement of the corresponding metatarso-phalangeal joint. No surgical aid was called in until a few days before his death, Mr. Watkins was then requested to examine the foot, but in consequence of the boy's screams and resistance, and the acute pain caused by the slightest manipulation, the examination was not satisfactory. As it was absolutely necessary to decide whether the case was one of dislocation or diseased joint, Mr. Watkins proposed another examination under chloroform, to which no objection was offered, the mother being made to understand that the boy would be put into a sound sleep, during which the examination might be accomplished without causing him any pain. Accordingly, on Friday (27th), Mr. Watkins called, and having placed the boy on a bed, proceeded to administer the chloroform by inhalation. As the object was merely to secure insensibility to pain during the very short period required for the examination of the foot, it was intended to induce the very slightest state of anæsthesia compatible with the attainment of that object. The handkerchief upon which the chloroform was applied was a stout

cotton one furnished by the mother, and two of the corners folded over the part, which was moistened with chloroform, were interposed between the latter and the lips and nostrils of the patient. Though the boy seemed somewhat afraid of inspiring the vapour freely, it caused neither cough, sneezing, nor any sign of irritation of the air passages. Mr. Watkins had himself taken a full inspiration from the handkerchief before applying it to the patient. After an interval of from thirty to forty seconds the desired effect being apparently produced, Mr. Watkins took hold of the foot, but had no sooner done so than the boy sprang up, and screamed lustily, declaring that he would not submit to the examination, and placing his other foot across the affected one, succeeded in preventing it: thus proving that the apparent effect of the chloroform was not real. An interval of two minutes or more was spent in pacifying and reassuring him, and the handkerchief was again moistened, and placed lightly over the lower part of the face. He evaded the inhalation of the chloroform for some twenty or thirty seconds by first holding his breath, and then suddenly turning his head aside, and taking a full inspiration quite clear of the handkerchief; but on being encouraged he steadily inspired the vapour. After some six or eight inspirations the desired condition appeared to be produced. The pulse had not indicated the slightest disturbance of the circulation, the countenance was perfectly composed, and natural in colour as well as in expression, and the breathing was soft and uniform as in natural sleep. Mr. Watkins, having given the handkerchief into the mother's hand, was again taking the foot, when the patient made two short stertorous inspirations, the chloroform was at once discontinued, but the change from a slight to an extreme condition of anæsthesia became rapidly apparent. The pulse fell at once, and after a very few hurried and feeble beats ceased to be perceptible at the wrist; the lips assumed a livid hue, which almost instantaneously spread itself upwards and downwards over the whole surface, and a small quantity of frothy mucus ran from the mouth. Cold affusion was instantly and freely applied, and the patient was turned over, care being taken to keep his mouth from the pillow. Twice or thrice a succession of short laboured inspirations induced the hope that the heart was resuming its functions. Hot water was on the spot, and flannels taken from it were immediately applied to the epigastrium; but all in vain, for the patient ceased to breathe in about ten minutes. As a last resource, artificial respiration in the direct manner was commenced, and carried on vigorously for several minutes, but without any sign of the re-establishment of the heart's action. In reply to a question from the coroner, Mr. Watkins emphatically stated that he was not using the chloroform experimentally, for that his experience during the late war had made him so familiar with its effects, and the mode of its employment, as to render experiment superfluous, and he had since been in the habit of using it very frequently, and with the greatest advantage in private practice, both in midwifery and surgical cases. In reply to another question, he stated that the habitual presence of two medical men during the employment of chloroform would be quite impracticable in country districts, more especially in midwifery cases; but at the same time he wished it to be clearly understood that he should never think of attempting, under the use of chloroform, any operation embracing the section or ligature of blood-vessels, or in any way attended with danger of hemorrhage, except with assistance of another surgeon, whose special business it would be to regulate the anæsthetic condition of the patient. Mr. Farmer, surgeon of Silverstone, was summoned by the coroner, and examined in order to assist the jury in arriving at a correct opinion with regard to the care employed in administering the chloroform, the fact of Mr. Watkins being justified in using it in this case, and the correctness of the means employed in the endeavours to restore the patient. The evidence of Mr. Farmer on these points was such as to exonerate Mr. Watkins from any imputations of unskilfulness or of want of due precaution, and also to justify the use of the chloroform in such a case. The jury, after a short consultation, found, "That the deceased came by his death from the effects of chloroform administered by Mr. Watkins for the purpose of producing insensibility to pain."—*Dublin Med. Press*, Sept. 22, 1858.

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Muriate of Ammonia in Neuralgia.—Some of the preparations of ammonia have

long been in use in France, Germany, and elsewhere, as remedies in various nervous affections, with variable success. At the Salpêtrière and the Bicêtre hospitals in Paris, the valerianate of ammonia has been much used in epilepsy for years, in the formula of three parts of valerianic acid, two parts of alcoholic extract of valerian, water ninety-five parts, and sesquicarbonate of ammonia in sufficient quantity to neutralize the acid. The dose is a drachm three times a day. Latterly, the muriate of ammonia has been brought forward on the authority of the Germans, as valuable in neuralgia, especially of the face, and we have recently had the opportunity of seeing it tried in a favourable case, at Guy's Hospital, under the care of Dr. Wilks, and, so far, with some benefit. The patient is a man aged fifty-five, who has been subject to facial neuralgia of the left side for the last four or five years, during which period he has undergone various modes of relief ineffectually. He was put upon half a drachm of the muriate, in water, every six hours, and although he has been more than a week under this treatment, he is certainly much relieved, the pain having diminished. Even supposing that this man is cured, a more extended trial of the agent is required to warrant the eulogium passed upon it by the Germans. In certain forms of chronic diarrhœa it is really a valuable agent. We may refer to this subject again.—*Ibid.*

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Application of Sugar when Lime has entered the Eye.—The *Indicateur de Mayence*, in relation to cases of workmen becoming blinded by the action of lime which has entered the eye, recommends, as a well-approved application in the case of such accidents, a strong solution of sugar, which is to be inserted drop by drop under the eyelids. This application can usually be immediately obtained, and completely prevents the caustic action of the lime.—*Ibid.* from *Journ. de Chimie Méd.*, Aug., 1858.

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Pepsin.—M. Mialhe has inserted in the *Bulletin Général de Thérapeutique*, a new formula for the preparation of this medicament, which he considers is exempt from the inconveniences attached to those heretofore in general use. This elixir, he says, has a very agreeable taste; and women and children take it without any repugnance, and even with pleasure. It is administered immediately after each repast in a spoonful, containing one gramme (15 grains). This is the formula. Pepsin (prepared after the method of MM. Corvisart and Boudalt, with amylaceous matters), 6 grammes; distilled water, 24 grammes; white wine (de Lunel), 54 grammes; white sugar, 30 grammes; spirits of wine, at 33°, 12 grammes. These materials are mixed together until the sugar is quite dissolved, and are then filtered.—*Med. Times and Gaz.*, Oct. 9, 1858.

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Artificial Dilatation of the Larynx in Croup.—Much discussion has of late taken place at Paris respecting a bold measure in croup—viz., actual catheterism of the larynx and trachea, followed by caustic injections, proposed and successfully practised by M. Loiseau, of Montmartre, near Paris. This operation is to prevent the necessity of tracheotomy, and has been warmly supported by M. Trousseau, in a report presented by this physician to the Academy of Medicine. Several successful cases have been quoted: one, however, proved fatal in August last.

The Academy has very recently heard another paper on the "Dilatation of the Larynx in Croup," to render tracheotomy unnecessary. The author is M. Bouchut, an eminent hospital physician of Paris. Trials were first made on the dead body, and a silver, truncated, hollow cone, a little smaller than a common thimble, was passed into the larynx, and was felt to dilate that passage perfectly. A series of instruments were contrived by M. Bouchut for the introduction of the cone, or canula, to which a silk thread is fixed, which hangs out of the mouth. Two children, affected with diphtherite, have been operated upon by the dilator, full details being given by M. Bouchut in a paper presented to the Academy of Medicine. Although the results have not been favourable in one case, it has been proved by these operations that a hollow, truncated cone can, in the paroxysms of suffocation of diphtherite, be introduced into the larynx, and there left for several hours, to the great relief of the child. Respiration, in both cases, became perfectly tranquil after the cone was introduced, the same being subsequently removed with the greatest ease. Further trials will prove whether this method of admitting air is preferable to tracheotomy. —*Lancet*, Oct. 2, 1858.

Infantile Convulsions.—When a child has convulsions, says M. Trousseau, learn to act quietly, indulge in no tumultuous proceedings; inquire if your patient is subject to such accidents, and if they generally pass away of themselves; if so, then little medical interference is required, and generally speaking, the convulsions preceding eruptive fevers will also quietly pass away. Bleeding, prolonged baths, violent purgatives, vesications made by boiling water, so far from being of service, aggravate the disease, interfere with its progress, retard the eruption, and occasion complications. Persons, strangers to the art of medicine, and even physicians themselves, often act in a very absurd manner. They pour boiling water over the legs of unfortunate children, and thus occasion more serious diseases than the evil they desire to avert. This boiling water, thus brutally applied, is it not the frequent cause of those horrible scalds, which cause the death of so many children? What physician has not seen them? Sometimes the doctor comes and envelops the legs of the wretched child in linen wrung out of boiling hot water. The child is comatose, and feels not, and thus the patient is killed instead of saved. I saw one, who was my master—Marjolin—thus treated; boiling water was applied to rouse him out of the stupor which had supervened in the course of a typhoid affection; he suffered in consequence from deep ulcerations.—*Med. Times and Gaz.*, Oct. 9, 1858.

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Tying of the Œsophagus.—The Academy of Medicine of Paris have lately come to the conclusion of a long discussion on the above subject. The ligature of the canal in question is stated by Orfila, in his Treatise on Toxicology, to have been applied upon dogs in more than fifty cases, these animals having survived when the thread was left from twenty-four to thirty-six hours. It seems that doubts arose in the minds of two professors at the Veterinary College of Alfort, near Paris—Messrs. Bouley and Raynal; experiments were made upon eight dogs, and five of these survived only a short time. Indeed, one lived only three hours, and another only one hour and three-quarters. With two of the dogs the ligature was removed in two hours, and these did not perish. These facts were brought before the Academy by Messrs. Bouley and Raynal; and that learned body appointed a committee, before whom the experiments were repeated with nearly the same results. M. Trousseau has reported upon the proceedings, and has laid down ten propositions, of which the fourth is the most important. Its substance is, that no reliance can be placed on the poisonous properties of some substances which are introduced into the body for the sake of experiment whilst the œsophagus is tied; because the committee are convinced, from the experiments made before them, that dogs may die solely in consequence of the tying of the œsophagus. Hence it is plain that the toxicological experiments which Orfila made, after putting a ligature on that canal, require revision; and that his deductions may be suspected to be erroneous.—*Lancet*, Sept. 11, 1858.

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Sepometer.—Among the many things which have troubled the minds of ordinary thinkers, has been the assertion of chemists, that the air had in all places the same composition. We cannot, therefore, be sufficiently thankful to Dr. R. A. Smith, of Manchester, for his discovery of an instrument by means of which we can ascertain the *causes* of the different degrees of purity of air. As by means of this instrument the actual amount of putrescible matter in the air can be measured, Dr. Smith has given to it the name of *Sepometer*. The salt he uses, as a measurer of impurity, is almost the best oxydizing agent with which chemists are familiar; it is the permanganate of soda. The process consists simply in ascertaining how much of the permanganate is decomposed by a given amount of air. The indications are very beautiful, and exhibit the greatest difference between the air of towns, country, and sea. The use of blood by Dr. Smith is also novel. By means of the smallest quantity we can almost instantly ascertain the difference between town and sea air, by shaking it with a small portion of blood in a tube. We shall be most anxious to hear of experiments performed in the wards of our hospitals by the aid of the Sepometer, and with the breath of patients, as we believe that much valuable information will be thereby obtained.—*Med. Times and Gaz.*, July 24, 1858.

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Preliminary Literary Education again required from Medical Students in France.—Our readers may recollect that in 1852 an

imperial decree removed the obligation, formerly imposed on students, to produce the degree of Bachelor of Letters (tantamount to our B. A.) before commencing their medical studies. Proficiency in the sciences allied to medicine was alone required. It has, however, been found that the absence of a literary education had a very unfavourable effect upon the young men entering upon their medical studies. The Superior Council of Education was consulted on the subject, and the members were almost unanimous in the opinion that the former state of things should be re-established. The Minister of Public Instruction, M. Rouland, also approved of the change; and upon his report to the Emperor, the decree has just been issued requiring every student to be possessed of the degree of B. A. before registering at the faculty. The first year is devoted to the study of the allied sciences as far as they bear upon medicine; and a modified degree of Bachelor of Science is, after examination, conferred upon the student who has completed his first year. The *bonâ fide* medical studies then begin, the young men are examined at the end of each session, and the last examination takes place when the four years are completed.—*Lancet*, Oct. 16, 1858.

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Homœopathy and Mormonism.—We find by the *Plymouth Journal*, of August 19th, that the Mormons are increasing in the neighborhood, but are complaining along with the homœopathic quacks, that their doctrines are misrepresented and misunderstood—that the book of Mormon and Hahnemann's Orghanon, the *Millennial Star* and the *Homœopathic Review* are not read so extensively as they used to be and should be, and that even when read, it is not with a view to enlightenment. From the controversy which has been going on in the Plymouth newspaper, we learn that a clergyman had been assailing a medical practitioner for his so-termed prejudices against the globulistic quackery, and for his objecting to waste his time in reading the rubbish of Hahnemann, Currie, Black, &c. The latter, in reply, referred to Mormonism, to the spread it had made in this country and in America, to its disciples in many parts of the kingdom, and to their forming a new state (Utah), as proving it equally to be a verity. He asked the divine whether he had ever read the Mormon Bible, and other works on Mormonism to satisfy himself *truly* and *clearly* as to the truth or falsity of the new system of religion? He offered, if his reverence would peruse these delectable writings, himself to read the works relating to homœopathy, and to try and profit by their perusal; rightly enough maintaining, however, that the one task was no more required than was the other to convince each of the absurdity of the separate delusions. We need scarcely add, that the clergyman thought Mormonism to be an arrant imposture, denounced its converts as either knaves or fools, and did not think it at all necessary to wade through the Mormon Bible in order to be sure whether his convictions were true or false. The medical practitioner thereupon declared that *he* had a like surety for the humbuggery of globulism, and equally declined the delightful privilege of being compelled to bewilder himself with its cabalistic books of *hocus pocus*. The reverend parson seems to have caught a Tartar.—*Lancet*, Sept. 11, 1858.

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PHILADELPHIA, *Nov.* 1, 1858. BLANCHARD & LEA.